

THE MAXIMUM HEIGHT OF PLANTS. II.

JOHN H. SCHAFFNER.

Last spring the writer published a few measurements of some common western plants in the Asa Gray Bulletin (Vol. 8:19-20). A few other measurements are given below, all from Kansas except four which are from Ohio. It would be well for all collectors to keep records of the size of the plants which they meet, including measurements of the height and also dimensions of the leaves, flowers, fruits and underground parts. In this way the manual of the future may be brought to represent more accurately the living plant as it grows in nature rather than the dried, shrunken and dwarf specimens of the herbarium.

	Gray	Britton	Measured Feet
<i>Agropyrum repens</i> (L.) Beauv.....		4	4 $\frac{3}{4}$
<i>Asparagus officinalis</i> L.....		7	8 $\frac{3}{4}$
<i>Polygonum orientale</i> L. (Ohio).....		8	9
<i>Allionia nyctaginea</i> Michx.....	3	3	5
(<i>Oxybaphus nyctagineus</i> Sw.)			
<i>Silene antirrhina</i> L.....	2 $\frac{1}{2}$	2 $\frac{1}{2}$	3
<i>Argemone alba</i> Lestib.....			5
<i>Lepidium virginicum</i> L.....			2 $\frac{1}{2}$
<i>Baptisia leucantha</i> T. & G.....		4	5 $\frac{1}{2}$
<i>Amorpha canescens</i> Nutt.....	3	3	4 $\frac{3}{4}$
<i>Kuhnistera candida</i> (Willd.) Kuntze.....		2	3 $\frac{1}{4}$
(<i>Petalostemon candidus</i> Michx.)			
<i>Acuan illinoensis</i> (Michx.) Kuntze.....	4	3	8
(<i>Desmanthus brachylobus</i> Benth.)			
<i>Meriolix serrulata</i> (Nutt.) Walp.	1 $\frac{1}{4}$	1 $\frac{1}{2}$	2 $\frac{1}{2}$
(<i>Oenothera serrulata</i> Nutt.)			
<i>Gaura biennis</i> L.....	8	5	10 $\frac{1}{2}$
<i>Apocynum cannabinum</i> L.....	3		8
<i>Marrubium vulgare</i> L.....		3	3 $\frac{1}{2}$
<i>Datura tatula</i> L. (Ohio).....		5	7
<i>Verbascum thapsus</i> L. (Ohio).....		7	8
<i>Cicuta maculata</i> L.....	6	6	7 $\frac{1}{3}$
<i>Symphoricarpos symphoricarpos</i> (L) MacM.....		5	8
(<i>S. vulgaris</i> Michx.)			
<i>Dipsacus fullonum</i> L. (Ohio).....		6	7 $\frac{1}{2}$
<i>Legouzia perfoliata</i> (L.) Britt.....	1 $\frac{3}{8}$	2	3
(<i>Specularia perfoliata</i> A. D C.)			
<i>Ratibida columnaris</i> (Sims) D. Don.....	2	2 $\frac{1}{2}$	2 $\frac{5}{8}$
(<i>Leptachys columnaris</i> T. & G.)			
<i>Achillea millefolium</i> L.....		2	2 $\frac{1}{2}$

CAMPUS BIRDS

A LIST OF BIRDS RECORDED BY THE WHEATON ORNITHOLOGICAL CLUB, FOR THE O. S. U. FARM AND CAMPUS.

ROBERT F. GRIGGS.

The first list of Campus birds was published by the Wheaton Club in the "Agricultural Student" for March, 1898. Since that time a number of additional species have been reported and it has been thought advisable to republish the entire list, inserting the additions in their proper places. The list below contains 137 species. It is compiled from the records of the Wheaton Club, excepting those species for which Prof. J. R. Taylor is given credit. Only those species of which nests, eggs, or fledgelings have been observed are reported as breeding. The names are preceded by the A. O. U. check list number. Further additions will be published from time to time.

Ord. PYGPODES.

Fam. PODICIPIDAE. GREBES.

6. *Podilymbus podiceps* (Linn.) Pied-billed Grebe, occasional.

Ord. ANSERES.

Fam. ANATIDAE. DUCKS, GEESE, etc.

137. *Anas americana* Gmel. American Widgeon, Bald-pate, occasional.
154. *Clangula hyemalis* (Linn.) Old squaw, occasional.
172. *Branta canadensis* (Linn.) Canada Goose, regular migrant.

Ord. HERODIONES.

Fam. ARDEIDAE. HERONS and BITTERNS.

190. *Botaurus lentiginosus* (Montag.) American Bittern.
191. *Ardetta exilis* (Gmel.) Least Bittern. accidental.
(J. R. Taylor.)
194. *Ardea herodias* Linn. Great Blue Heron.
201. *Ardea virescens* Linn. Green Heron, common, breeds.

Ord. PALUDICOLAE.

Fam. RALLIDAE. RAILS, GALLINULES, etc.

221. *Fulica Americana* Gmel. Coot, occasional.

Ord. LIMICOLAE.

Fam. SCOLOPACIDAE. SNIPES, SANDPIPERS, etc.

- 228. *Philohela minor* (Gmel.) American Woodcock.
- 230. *Gallinago delicata* (Ord.) Wilson's Snipe.
- 256. *Totanus solitarius* (Wils.) Solitary Sandpiper, occasional.
- 263. *Actitis macularia* (Linn.) Spotted Sandpiper, common.

Fam. CHARADRIIDAE. PLOVERS.

- 273. *Ægialitis vocifera* (Linn.) Killdeer, common, breeds.

Ord. GALLINAE.

Fam. TETRAONIDAE. GROUSE, etc.

- 289. *Colinus virginianus* (Linn.) Quail, generally one or two flocks, breeds.

Ord. COLUMBAE.

Fam. COLUMBIDAE. PIGEONS and DOVES.

- 313. *Zenaidura macroura* (Linn.) Mourning dove, abundant, breeds.

Ord. RAPTORES.

Fam. CATHARTIDAE. AMERICAN VULTURES.

- 325. *Cathartes aura* (Linn.) Turkey Buzzard, occasional.

Fam. FALCONIDAE. HAWKS.

- 333. *Accipiter cooperi* (Bonap.) Cooper's hawk, occasional.
- 337. *Buteo borealis* (Gmel.) Red-tailed hawk, occasional.
- 343. *Buteo latissimus* (Wils.) Broad-winged hawk.
- 360. *Falco sparverius* Linn. American sparrow hawk, common, breeds.
- 364. *Pandion haliaetus carolinensis* (Gmel.) American Osprey, accidental, reported by Mr. C. B. Morrey, during a spring flood.

Fam. BUBONIDAE. HORNED OWLS.

- 373. *Megascops asio* (Linn.) Screech Owl, common, breeds.
- 375. *Bubo virginianus* (Gmel.) Great Horned Owl, occasional.

Ord. COCCYGES.

Fam. CUCULIDAE. CUCKOOS, etc.

- 387. *Coccyzus americanus* (Linn.) Yellow-billed Cuckoo, common, breeds.
- 388. *Coccyzus erythrophthalmus* (Wils.) Black-billed Cuckoo.

Fam. ALCEDINIDAE. KINGFISHERS.

390. *Ceryle alcyon* (Linn.) Belted King-fisher, common, breeds.

Ord. PICI.

Fam. PICIDAE. WOODPECKERS.

393. *Dryobates villosus* (Linn.) Hairy Woodpecker, common, resident.
394. *Dryobates pubescens* (Linn.) Downy Woodpecker, common, resident, breeds.
402. *Sphyrapicus varius* (Linn.) Yellow-bellied Sapsucker, migrant.
406. *Melanerpes erythrocephalus* (Linn.) Red-headed Woodpecker common, breeds.
409. *Melanerpes carolinus* (Linn.) Red-bellied Woodpecker, resident.
412. *Colaptes auratus* (Linn.) Flicker, common resident, breeds.

Ord. MACROCHIRES.

Fam. CAPRIMULGIDAE. NIGHT-HAWKS, etc.

417. *Antrostomus vociferus* (Wils.) Whip-poor-will.
420. *Chordeiles virginianus* (Gmel.) Night-hawk.

Fam. MICROPODIDAE. SWIFTS.

423. *Chaetura pelagica* (Linn.) Chimney Swift, common, breeds.

Fam. TROCHILIDAE. HUMMINGBIRDS.

428. *Trochilus colubris* (Linn.) Ruby-throated Hummingbird.

Ord. PASSERES.

Fam. TYRANNIDAE. FLYCATCHERS.

444. *Tyrannus tyrannus* (Linn.) Kingbird, common, breeds.
452. *Myiarchus crinitus* (Linn.) Crested Flycatcher.
456. *Sayornis phoebe* (Lath.) Phoebe, common.
461. *Contopus virens* (Linn.) Wood Pewee.
466a. *Empidonax traillii* (Aud.) Traill's Flycatcher, breeds.
467. *Empidonax minimus* Baird. Least Flycatcher. (J. R. Taylor.)

Fam. ALAUDIDAE. LARKS.

474. *Otocoris alpestris* (Linn.) Shore Lark, winter visitant.
474b. *Otocoris alpestris praticola* Hensh. Prairie Horned Lark.

Fam. CORVIDAE. CROWS, etc.

477. *Cyanocitta cristata* (Linn.) Blue Jay, common resident, breeds.
488. *Corvus americanus* Aud. Crow, seen at all seasons.

Fam. ICTERIDAE. BLACKBIRDS, etc.

494. *Dolichonyx oryzivorus* (Linn.) Bobolink, common.
495. *Molothrus ater* (Bodd.) Cowbird, common, breeds.
498. *Agelaius phoeniceus* (Linn.) Red-winged Blackbird.
501. *Sturnella magna* (Linn.) Meadow Lark, common, breeds.
506. *Icterus spurius* (Linn.) Orchard Oriole.
507. *Icterus galbula* (Linn.) Baltimore Oriole, common, breeds.
509. *Scolecophagus carolinus* (Müll.) Rusty Blackbird.
511b. *Quiscalus quiscula aeneus* (Ridgw.) Bronzed Grackle, Crow Blackbird, common, breeds abundantly.

Fam. FRINGILLIDAE. FINCHES and SPARROWS.

517. *Carpodacus purpurens* (Gmel.) Purple Finch.
—-. *Passer domesticus* (Linn.) English Sparrow, superabundant, breeds.
529. *Spinus tristis* (Linn.) American Goldfinch, common.
533. *Spinus pinus* (Wils.) Pine Siskin.
540. *Pooecetes gramineus* (Gmel.) Vesper Sparrow, common, breeds.
542a. *Ammodramus sandwichensis savanna* (Wils.) Savannah Sparrow.
546. *Ammodramus savannarum passerinus* (Wils.) Grasshopper Sparrow, almost certainly breeds though no nest has been found.
552. *Chondestes grammacus* (Say.) Lark Sparrow.
554. *Zonotrichia leucophrys* (Forst.) White-crowned Sparrow.
558. *Zonotrichia albicollis* (Gmel.) White-throated Sparrow.
559. *Spizella monticola* (Gmel.) Tree Sparrow, common, winter resident.
560. *Spizella socialis* (Wils.) Chipping Sparrow, common, breeds.
563. *Spizella pusilla* (Wils.) Field Sparrow.
567. *Junco hyemalis* (Linn.) Snow-bird, common, winter resident.
581. *Melospiza fasciata* (Gmel.) Song Sparrow, abundant, resident, breeds.
583. *Melospiza lincolni* (Aud.) Lincoln's Sparrow.
584. *Melospiza georgiana* (Lath.) Swamp Sparrow.
585. *Passerella iliaca* (Merr.) Fox Sparrow.
587. *Pipilo erythrophthalmus* (Linn.) Towhee, common resident.

593. *Cardinalis cardinalis* (Linn.) Cardinal, common resident, breeds.
598. *Passerina cyanea* (Linn.) Indigo Bunting, common, breeds.
604. *Spiza americana* (Gmel.) Dickcissel.

Fam. TANAGRIDAE. TANAGERS.

608. *Piranga erythromelas* Vieill. Scarlet Tanager.
610. *Piranga rubra* (Linn.) Summer Tanager, May, 4, 1899. (J. R. Taylor.)

Fam. HIRUNDINIDAE. SWALLOWS.

611. *Progne subis* (Linn.) Purple Martin, common.
613. *Chelidon erythrogaster* (Bodd.) Barn Swallow, common, breeds.
617. *Stelgidopteryx serripennis* (Aud.) Rough-winged Swallow.

Fam. AMPELIDAE. WAXWINGS.

619. *Ampelis cedrorum* (Vieill.) Cedar-bird, Cherry-bird.

Fam. LANIIDAE. SHRIKES.

622. *Lanius ludovicianus* Linn. Loggerhead Shrike.

Fam. VIREONIDAE. VIREOS.

624. *Vireo olivaceus* (Linn.) Red-eyed Vireo, breeds.
627. *Vireo gilvus* (Vieill.) Warbling Vireo, common spring migrant.
628. *Vireo flavifrons* Vieill. Yellow-throated Vireo.
629. *Vireo solitarius* (Wils.) Blue-headed Vireo.

Fam. MNIOTILTIDAE. WOOD WARBLERS.

636. *Mniotilta varia* (Linn.) Black and White Creeper, common migrant.
639. *Helminthus vermivorus* (Gmel.) Worm-eating Warbler.
641. *Helminthophila pinus* (Linn.) Blue-winged Warbler.
642. *Helminthophila chrysoptera* (Linn.) Golden-winged Warbler. (J. R. Taylor.)
645. *Helminthophila ruficapilla* (Wils.) Nashville Warbler. (J. R. Taylor.)
647. *Helminthophila peregrina* (Wils.) Tennessee Warbler.
648. *Compsothlypis americana* (Linn.) Parula Warbler.
650. *Dendroica tigrina* (Gmel.) Cape May Warbler.
652. *Dendroica aestiva* (Gmel.) Summer Warbler, common, breeds.
654. *Dendroica caerulescens* (Gmel.) Black-throated, Blue Warbler.

655. *Dendroica coronata* (Linn.) Yellow-rumped Warbler, Myrtle Warbler.
657. *Dendroica maculosa* (Gmel.) Magnolia Warbler.
659. *Dendroica pensylvanica* (Linn.) Chestnut-sided Warbler.
660. *Dendroica castanea* (Wils.) Bay-breasted Warbler.
661. *Dendroica striata* (Forst.) Black-poll Warbler, common fall migrant.
662. *Dendroica blackburniae* (Gmel.) Blackburnian Warbler.
667. *Dendroica virens* (Gmel.) Black-throated Green Warbler.
671. *Dendroica vigorsii* (Aud.) Pine Warbler.
672. *Dendroica palmarum* (Gmel.) Palm Warbler.
674. *Seiurus aurocapillus* (Linn.) Ovenbird.
675. *Seiurus noveboracensis* (Gmel.) Water-thrush.
676. *Seiurus motacilla* (Vieill.) Louisiana Water-thrush. (J. R. Taylor.)
677. *Geothlypis formosa* (Wils.) Kentucky Warbler.
678. *Geothlypis agilis* (Wils.) Connecticut Warbler.
681. *Geothlypis trichas* (Linn.) Maryland Yellow-throat.
683. *Icteria virens* (Linn.) Yellow-breasted Chat, breeds.
684. *Sylvania mitrata* (Gmel.) Hooded Warbler.
685. *Sylvania pusilla* (Wils.) Wilson's Warbler. (J. R. Taylor.)
687. *Setophaga ruticilla* (Linn.) American Redstart, common migrant.

Fam. TROGLODYTIDAE. WRENS, etc.

704. *Galeoscoptes carolinensis* (Linn.) Cat-bird, common, breeds abundantly.
705. *Harporhynchus rufus* (Linn.) Brown Thrasher, common, breeds.
718. *Thryothorus ludovicianus* (Lath.) Carolina Wren, common resident, breeds.
721. *Troglodytes ædon* Vieill. House Wren, common, breeds.
722. *Troglodytes hiemalis* Vieill. Winter Wren.

Fam. CERTHIIDAE. CREEPERS.

726. *Certhia familiaris americana* (Bonap.) Brown Creeper, common winter visitant.

Fam. PARIDAE. NUTHATCHES, etc.

727. *Sitta carolinensis* Lath. White-breasted Nuthatch, common resident.
728. *Sitta canadensis* Linn. Red-breasted Nuthatch, migrant.
731. *Parus bicolor* (Linn.) Tufted Titmouse, common resident.
735. *Parus atricapillus* (Linn.) Chickadee.

Fam. SYLVIIDAE. KINGLETS, etc.

- 748. *Regulus satrapa* Licht. Golden-crowned Kinglet, common.
- 749. *Regulus calendula* (Linn.) Ruby-crowned Kinglet.
- 751. *Polioptila caerulea* (Linn.) Blue-gray Gnatcatcher.

Fam. TURDIDAE. THRUSHES, etc

- 755. *Turdus mustelinus* Gmel. Wood Thrush, common, breeds.
- 756. *Turdus fuscescens* Steph. Wilson's Thrush, Veery.
- 757. *Turdus aliciae* Baird. Gray-cheeked Thrush.
- 758a. *Turdus ustulatus swainsonii* (Cab.) Olive-backed Thrush.
- 759b. *Turdus aonalaschkae pallasii* (Cab.) Hermit Thrush.
- 761. *Merula migratoria* (Linn.) American Robin, abundant,
breeds.
- 766. *Sialia sialis* (Linn.) Bluebird, common.